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MIND, THE CREATOR OF MATTER.

A NEW era is dawning upon the world—an era in which religion will become the deepest science, and science in its truest sense religion. The deeps of existence, psychical as well as physical, are being sounded, and the recent conquests in the domain of science unfold prospects of a mastery of nature such as never before occurred to man—to modern man, at least—in his wildest dreams. What is the domination to be? Are we to witness merely a fresh following of the old road, with telescope, spectrum analysis and chemist's balance for the instruments of advance; or is it the power of mind over matter, directly exerted, which is to be the new solvent of nature's problems, the new agency for bending nature to man's will, for remoulding it into harmony with his highest needs and aspirations?

The question summons us at once to a brief consideration of what we mean by matter and by mind. Are they totally different things? The whole trend of modern thought is in the direction, if not of identifying them with one another, at least of bringing them closer and closer together. The most salient feature of modern progress is the steady shifting of the emphasis from the material to the mind values in the broadest sense of the word. We cognize objects only in terms of our conscious states; in the last analysis all material values are found to be mind

values. The world as we know it presents itself in two aspects—the outside realm of matter, consisting of objects revealed to us through our senses, and the inner realm of feeling and thought which is without anything like location in space.

Take the outer world and see how far we can trace it. I hold an apple in my hand. What do I know of it? I know its color, its form, its hardness, its taste, its odor—in a word, I know what my five senses tell me. Remove eye, hand, tongue, and these qualities will become non-existent, being conditioned by the nature of my organism. Professor James in his transmission theory maintains that our organism, instead of revealing to us the nature of the universe, limits our knowledge of it by our very constitution to what we acquire with our five senses. We cognize only the things for the perception of which we have corresponding organs. To illustrate: a colored pane of glass—say red—transmits only red rays, shutting out many other vari-colored rays, which, although they cannot be transmitted by the red pane, exist nevertheless. “In my Father’s house are many mansions.”

Matter is not the ultimate. Beneath matter, science tells us, is ether—the medium which pervades all space—the interstellar immensities as well as the infinitesimal interstices between material atoms. Some modern physicists have compared it to a jelly; others describe it as denser than steel; all agree that it is incompressible and is in some way the reservoir of energy for all material phenomena. The existence of ether is not merely speculation, it is a reality; and Sir Oliver Lodge calls it the most important reality with which we are acquainted. The senses tell us nothing of it, but without ether such phenomena as light, electricity, magnetism, radio-activity, would be impossible. It is through this continuous substance that light passes to us from the sun, stars and other luminous objects; with-

out the undulations which it transmits the whole world of objects which we now see in their shapes, colors and distances, would be invisible. Not only in this way is ether the vehicle of energy flowing in to us from without—it is the very source of the things to which we have access through our sense organs. Subject to some sort of stress, it differentiates itself into matter; in all probability the so-called electrons, which unite to form atoms, are knots or rings formed in and of the ether itself.

Such is the outer world. What now of the inner, which we know only as states of consciousness? We know it neither as matter nor as motion, but we find it intimately connected with brain, and as the brain is made up of molecules, these must vibrate during the activities of thought. We here have the link connecting the two worlds which at first sight would seem to be so remote from each other. Matter we know through our senses; matter is evolved from ether; ether we do not know; our thought we know. Our thought is not matter, but it is accompanied by vibrations in the ether. Thought is connected with matter through our bodily frame; it is not less distinctly connected with ether through its *modus operandi*. Meanwhile that which logic asserts is fast becoming the favorite conclusion of science. Not only naturalists like Naegeli and Haeckel maintain that matter is endowed with elementary feeling; the physicists also incline to this view, and Sir Oliver Lodge in his book on *The Ether of Space* writes:

“The universe we are living in is an extraordinary one, and our investigation of it has only just begun. We know that matter has a psychical significance, since it can constitute brain, which links together the physical and the psychical worlds. If any one thinks that ether, with all its massiveness and energy, has probably no psychical significance, I find myself unable to agree with him.”

And Camille Flammarion sums up the argument of his book on *Mysterious Psychic Forces* in the words:

“The phenomena of which we are speaking are manifestations of the universal dynamism with which our five senses put us very imperfectly in relation. We live in the midst of an unexplored world in which the psychical forces play a role still very insufficiently investigated. These forces are of a class superior to the forces usually analyzed in mechanics, in physics, in chemistry. They are of the psychical order, have in them something vital and a kind of mentality. They confirm what we know from other sources, that the purely mechanical explanation of nature is insufficient, and that there is in the universe something other than so-called matter. It is not matter that rules the world; it is a dynamic and psychic element. . . . There is in nature, especially in the domain of life, the manifestation of instinct in vegetables and animals, in the general soul of things, in humanity, in the cosmic universe, a psychical element which appears more and more in modern studies, especially in researches in telepathy, and in the observation of the unexplained phenomena which we have been studying in this book.”

Science not only shows us how moving matter causes vibrations in the ether, producing motion in other matter at a distance; it also enables us to realize the possibility of action at a distance by means of thought, and this without the instrumentality of speech, telegraph wires, or other physical agencies. For if thought be accompanied by molecular vibrations in the brain, the ether must be moved by these just as it is moved by the vibrations which produce the phenomena of light and electricity. Said Sir William Crookes, the famous English physicist, in his address as president of the British Association for 1898:

“It would be well to begin with telepathy, with the fundamental idea that thoughts and images may be transferred

from one mind to another without the agency of the recognized organs of sense; that knowledge may enter the human mind without being communicated by any hitherto known or recognized ways. . . . If telepathy takes place, we have two physical facts—the physical change in the brain of A, the suggestor, and the analogous physical change in the brain of B, the recipient of the suggestion. Between these two physical events there must exist a train of physical causes. Such a séquence can only occur through an intervening medium. All the phenomena in the universe are presumably in some way continuous, and it is unscientific to call in the aid of mysterious agencies when with every fresh advance in knowledge it is shown that ether vibrations have powers and attributes abundantly equal to any demand—even to the transmission of thought. . . . It is known that the action of thought is accompanied by certain molecular movements in the brain, and here we have physical vibrations capable from their extreme minuteness of acting direct on individual molecules, while their rapidity approaches that of the internal and external movements of the atoms themselves. . . . It will be found possible to discover a path by which telegraphing without wires and transferring thought from mind to mind can be found to harmonize.”

Examples of this possibility of moving the matter of the human brain at a distance by the putting forth of purely mental power have been gathered in thousands by societies for psychical research on both sides of the water. It is only a step further to show that matter outside the human brain—matter which is inorganic—may also be moved and influenced by the action of mind. In 1871, Sir William Crookes published an account of experiments conducted by him, under a system of rigid scientific tests, which established “the existence of a new force in some unknown manner connected with the human organization, which for

convenience may be called the psychic force." In this account Sir William demonstrated that by putting forth of the psychic force it is possible to alter the weight of bodies and play upon musical instruments without direct human intervention.

But there is still a third stage in the power thus exerted by mind upon matter—that of actually creating it. For what does the creation of matter really mean? It does not mean the bringing of matter into existence out of nothing; it simply means the rearrangement of the atoms which already exist. The ultimate parts of all kinds of matter are the same; the different types of matter known to us are due to different combinations and motions of the ultimate units, and these units are simply modifications of the ether itself. Tarde, the French writer, maintains that all spatial likenesses in the universe, and therefore the likenesses of the ultimate parts of matter, are due to likenesses of vibration; and if the mind be capable of giving rise to vibrations in the ether, it should be able to call matter from the ether. It was Sir William Crookes who, alluding to Tyndall's assertion that he saw in matter the promise and potency of all forms of life, said: "I should prefer to reverse the apothegm and say that in life I see the promise and potency of all forms of matter."

Some time ago Professor Ramsey startled the scientific world with the announcement:

"I have found that when electricity is passed through a vacuum tube containing a little hydrogen, two other gases, helium and neon, appear. . . . The chief value of these experiments is that they point the way for a change of one form of matter—an element supposed to be incapable of change—into another, or that it shows that what we have hitherto considered as substance is but a manifestation of forces. In any case a severe blow has been dealt to the present theories concerning the constitution of mat-

ter....It means that we must cease to believe in and to speak of 'elements.' We must adopt new phrases. New theories, founded largely on the old ones but with serious modifications, must be advanced. We must experiment further with electricity and its effects upon matter. I imagine that if any experiments are carried on, we shall discover many startling facts concerning electricity and may even discover a new and enormously large source of electrical power."

Where shall we look for this unknown source of power, and what may be its *modus operandi*? Thus far we have seen that logic and scientific research admit of the possibility of synthesizing matter out of ether. The principle that underlies this creation and predetermines the resultant forms and shapes is the one with which human thought has wrestled from time immemorial, whether calling it the "idea" of Plato, the "*élan vital*" of Bergson, or simply the "first cause." In the universe this principle manifests itself as motion along the path of least resistance, thus fulfilling that law of harmony and unity which like a thread of gold runs through the whole fabric of creation, from the orbits of planets and stars to the circling motions of electrons in atoms, from the formation of a snow crystal and the wing of a butterfly to the Greek Parthenon, a Madonna of Raphael, a symphony of Beethoven or a sonnet of Shakespeare. In other words, the intelligent principle is the mode in which the universe works in what is called evolution, and therefore has its outcome in forms and motions characterized by harmony and unity. Ether, in differentiating itself, first produces electrons, which in their turn give rise to atoms. These, following the path of the least resistance and subject to unlike stress, unite to form different kinds of matter, until finally the creative activity exerted by the universe passes over into the organism in a highly complex form.

Man as an organism also creates intelligent forms by virtue of his derivation from the universe. At first he creates by moulding objects with his hands, and later by means of machines. But this is only the initial stage of his creative power. Mind comes to have greater and greater meaning in his development and activities. As the individual mind gets more from and cooperates more with the race mind, human advance is accelerated. A further stage of this development will come when, instead of using hands, tools and machines to supply his needs and shape his environment, man will accomplish these ends by means of brain waves generated by his thought. These waves will be creative, just as the ether which produced and moulded matter is creative, since both are ultimately of the same nature. They will result in forms which are intelligent because the production of such is the end toward which all activities ultimately tend. The link between these effects of thought and the effects produced by the universe is the link of a fundamental process which is common to all existence. But in order to be creative these thought waves must be rhythmic, that is to say, they must move in accordance with the laws of harmony and unity—this is the cardinal condition, the *sine qua non* of the mind's mastery over matter, the *raison d'être* of all religions, the logical deduction of all modern science. The power of rhythm in ether may be brought home to us by the force of rhythmic waves in our material world. It is a well-known fact that a body of soldiers must break step when crossing a bridge to prevent its collapse under their rhythmic tread. The fall of Jericho's walls at the trumpet blasts of the Israelites may be cited in illustration of the force exerted by sound-waves. Religion is in complete accord with science when it inculcates goodness, righteousness, moral perfection in man, for in this direction lies man's oneness with his Creator. "Except ye become as little

children ye shall not enter into the kingdom of heaven." By achieving unity and harmony within himself and with his fellow beings man will put himself in tune with the universe, and wield the powers of the cosmos itself—his rhythmic thought-waves acquiring under these conditions the power to liberate what are called the "intra-atomic energies" and shape them at will. This power at present is dormant or dissipated, largely because of the conflicts and cross-purposes which continue to divide mankind.

The newly-discovered phenomena of radio-activity go far toward bridging the gap between matter and mind. They show that matter is continually undergoing disintegration, and that by rearrangements due to this disintegration material substances change one into another—uranium into radium, radium into helium, neon or argon; copper into lithium, thorium into carbon, the series closing, it is believed, with lead. Nature, presenting us these transformations in progress on a large scale, reveals one of the methods by which matter is created, and suggests the possibility of advance, not only to physical means of imitating such processes, but also to the reproducing of them by mental action. Has not such a power of creating matter been already exercised in the past? Does not progress move in cycles, and has not humanity gained again, by infinite struggle that which it lost through some mistake or blunder of its own? This is the view expressed by Professor Soddy, the English physicist, in his *Interpretation of Radium*.

"Some of the beliefs and legends which have come down to us from antiquity are so deep-rooted that we are accustomed to consider them almost as old as the race itself. One is tempted to inquire how far the unsuspected aptness of some of these beliefs and sayings to the point of view so recently disclosed is the result of mere chance or coincidence and how far it may be evidence of a wholly unknown

and unsuspected civilization of which all other relic has disappeared. It is curious to reflect, for example, on the remarkable legend of the philosopher's stone, one of the oldest and most universal beliefs, the origin of which, however far back we penetrate into the records of the past, we do not seem able to trace to its source. Let us give the imagination a moment's further free scope in this direction. . . . What if this point of view that has now suggested itself is true, and we may trust ourselves to the slender foundation accorded by the traditions and superstitions which have been handed down to us from prehistoric time? Can we not read into them some justification for the belief that some former forgotten race of man attained, not only to the knowledge we have so recently won, but also to the power which is not yet ours? Science has reconstructed the story of the past as one of the continuous ascent of man to the present-day level of his powers. In face of the circumstantial evidence existing of this steady upward progress of the race, the traditional view of the fall of man from the higher, former state has become more and more difficult to understand. From our new standpoint, the two points of view are by no means as irreconcilable as they appear. A race which could transmute matter would have little need to earn its bread by the sweat of its brow. If we can judge by what our engineers accomplish with their comparatively restricted supplies of energy, such a race could transform a desert continent, thaw the frozen poles, and make the whole world one smiling garden of Eden. Possibly they could explore the outer realm of space, migrating to more favorable worlds, as the superfluous to-day migrate to more favorable continents. One can see also that such dominance may well have been short-lived. By a single mistake, the relative positions of nature and man, as servant and master, would, as now, become reversed, but with infinitely more disastrous consequences, so that

even the whole world might be plunged back again under the undisputed sway of nature, to begin once more its upward, toilsome journey through the ages. The legend of the fall of man possibly may indeed be the story of such a past calamity."

Our modern knowledge of psychical phenomena may thus be a merely recovered remnant of knowledge once possessed in vastly greater fulness. There may have been a time when telepathy was as common and as highly developed for the practical purposes of life as telephony and telegraphy are to-day. The occultism of the East and the strange powers of communicating information to a distance possessed by many savage tribes suggest an age in which, by mind action alone, results were achieved that in our time would be called miraculous. And when an exact man of science suggests that our race was once able to disintegrate matter and mould it into new forms at will, it is surely no mere poetic fancy to imagine that this power, existing at all times potentially, may finally be put forth dynamically in acts of mind.

The merely physical aspect of radio-activity is itself a revelation of such startling importance as to be almost incredible.

"Radio-activity," says Professor Soddy, "has raised an issue which it is safe to say will mark an epoch in the progress of thought. With all our mastery over the powers of nature, we have adhered to the view that the struggle for existence was a permanent and necessary condition of life. To-day it appears as though it might well be but a passing phase to be altogether abolished in the future, as it has to some extent been mitigated in the past by the unceasing, and as it now appears, unlimited ascent of man to knowledge, and through knowledge, to physical power and domination over Nature."

The struggle for existence to-day among human beings

is largely a struggle for energy, and it is because of the insufficient supply of this that competition is so fierce, in many respects even so unmoral, and that money, which is simply so much energy, is so unequally distributed. Science now opens up the prospect of such a mitigation of the struggle as will lay at least a physical foundation for a new order of society. When it becomes possible to liberate and to utilize the "intra-atomic energies," matter will supply us with the powers needed for life and social progress in such unlimited quantity as literally to change the face of the world.

The process of creating matter out of ether is much simplified by the consideration that atoms, being already in existence, the transmutation of one set of them into another, would be all that is necessary to obtain any desired material results. Says Soddy in *Matter and Energy*:

"The discovery of the relation of the atom to energy within the last decade recalls the strange medieval myth that the Philosopher's Stone, which had the power of transmuting metals, when discovered, would prove also to be the elixir of life. Transmutation, the pulling to pieces and putting together of atoms, would render available the primary sources of energy, which maintain the time-defying processes of cosmical evolution."

Such a philosopher's stone man possesses in his brain with its brain waves. It is generally agreed now that all life is inseparably bound up with electricity, and that our own organism is nothing but a storage electric battery, while our brain waves are disturbances in the ether similar to light or electric waves. The extreme minuteness of these brain waves does not militate in the least against their becoming, while acting rhythmically, the greatest source of power ever at the disposal of man, any more than the extremely small attractive power of amber known to the ancient Romans militated against electricity becoming the

mighty agent of power it is at present. Sir Oliver Lodge says:

“If the ether can be set spinning, we may have some hope of making it imitate the properties of matter, or even of constructing matter by its aid. But how are we to spin the ether? Matter alone seems to have no grip of it. . . . We cannot spin ether mechanically. But we can vibrate it electrically; and every source of radiation does that. An electric charge, in sufficiently rapid vibration, is the only source of ether waves that we know; and if an electrical charge is suddenly stopped, it generates the pulses known as X-rays, as the result of the collision. Not speed, but sudden change of speed, is the necessary condition of generating waves in the ether by electricity. We can also infer some kind of rotary motion in the ether; though we have no such obvious means of detecting the spin as is furnished by vision for detecting some kinds of vibration. Rotation is supposed to exist whenever we put a charge into the neighborhood of a magnetic pole. Round the line joining the two the ether is spinning like a top. I do not say it is spinning fast; that is a question of its density; it is, in fact, spinning with excessive slowness, but it is spinning with a definite moment of momentum. . . . The fact of such definite rotation was discovered by Faraday. . . . In whatever way it is regarded, it is an example of the three rectangular vectors. The three vectors at right angles to each other, which may be labelled Current, Magnetism and Motion, respectively, represent the quite fundamental relation between ether and matter, and constitute the link between electricity, magnetism and mechanics. Where any two of them are present, the third is a necessary consequence. This principle is the basis of all dynamos, of electric motors, of light, of telegraphy, and of most other things. Indeed, it is a question whether it does not underlie all that we know in the whole of the physical sciences;

and whether it is not the basis of our conception of the three dimensions of space."

Since mathematics offers us a glimpse into a fourth dimension of space as yet transcending our actual experience, why could we not put the brain waves, of whose force we have already a glimmering, however faint, in the same group with current, magnetism and motion—all being fundamentally but modes and manifestations of one common energy, the ether?

The fact that it is associated with man's organism, and is an emanation of both his physical and spiritual nature, invests with a special significance this hitherto almost wholly unexplored force. Nor were the scientists slow to recognize the portentous value of brain waves and try to reduce their manifestations to strictly scientific data.

A discovery of this kind was a few years ago announced to the French Academy of Sciences in the form of observations showing the existence of a vital emanation from the human body, "analogous in its behavior to that of radium, Crookes' bulbs, X-rays, radio-activity" and like them capable of producing images on the photographic plate. The evidence for these experiments cannot yet be considered conclusive, but it is a fact of enormous significance that such experiments are being made. Science first heard of them thirty years ago; they have been frequently repeated since then; and the French savant's belief that there is some new knowledge to be won in this direction may very well indicate the path along which humanity is yet to travel. If a tiny bit of inorganic matter like radium, extracted with infinite toil and patience from a mass of pitchblende, can display powers which astonish the scientific world and revolutionize scientific conceptions, what might not be expected from "vital rays," and still more from the subtle activities of the human brain?

It is interesting to note that in the past human reverence

has persistently surrounded the heads of saints and divine personages with halos. May these halos not only represent power outflowing from the human brain, but also stand for harmony between spirit and matter—a harmony such as was meant by Kant when he spoke of “good-will,” such as found complete manifestation in the divine personality of Christ at whose word spirit (or ether, or whatever it may be called) was translated into matter? Are we not justified in assuming that the mistake, the blunder to which Professor Soddy refers—the serpent that crept into the garden of Eden and caused the fall of man—may well have been the evil which, entering the human soul, disrupted the harmony between matter and spirit and plunged the race into the lower state of toil and pain?

Staggering and stupendous as is the contention that rhythmic thought waves are capable of synthesizing matter from ether, it is by no means far fetched, but fully borne out by the past achievements in the domain of science. Electricity, as a force, has always existed; as a factor in human progress, it is a mere infant born of yesterday. Could you have told an ancient Roman, as he amused himself by rubbing a piece of amber and watching it attract light bodies, that this selfsame power would one day propel over the seas ships a thousand times heavier than the largest Roman galley, that it would carry the human voice over distances farther than the farthest reach of the Roman aqueducts, and even signal human thought far beyond the pillars of Hercules, the ancient Roman would surely have viewed such a prophecy as arrant nonsense if not downright madness.

Thus far we have dealt with the scientific aspect of the problem. Let us now see how far we can rely upon metaphysics in support of this view. From what we know of the universe, both through personal experience, and by way of pure reasoning and deduction, it is clear that the creative

process in nature must have mind behind it. That is, the contrivances we see in nature cannot arise (1) either by chance, through purely mechanical causation, or (2) by voluntary action and manipulation in the manner in which we human beings produce results and carry out our plans. The mechanical process in nature, that is, causation, must therefore be guided to ends, to the realisation of the results which we call teleological, that is, planned with view to ends. If mind is operative in nature it cannot be merely an abstract principle, but must be an impelling force. It must so permeate and influence cause as to give it the character of a working through means to ends. The mind engaged must be omniscient, aware of all forces and of all possible results which may come from the direction and guidance of them in any particular case. Such a mind must act directly as mind, without needing to be embodied in organic form or to work upon its material by way of the voluntary action through which we accomplish our results as human beings. We must assume therefore that creative power is put forth as a direct influence exerted, first upon ether to differentiate it into matter, and then upon matter to bring into existence the various organic and inorganic forms which make up what we know as the world. Up to the present man's powers of contrivance—of reaching ends by way of means—have been restricted to the physical manipulation of matter by means of his organs, tools and machines, with mind coming in only as a guide to these. In the ultimate stage of our evolutionary progress man's mind must become a direct, and not merely a secondary factor, in his creative activity.

How do the teachings of the foremost metaphysicians of modern times bear out this view? Paul Janet says in *Les causes finales*:

“If each one of the things in the universe taken separately has been produced by another — why, for what

end, all taken together, have they been made? Unity of cause presupposes unity of end. If a single cause has done it all, it must have done it for one end, and as the cause is absolute, the end also must be absolute. But as there are no two absolutes, the cause and the end must be identical; and consequently, God must have made this world for Himself. If God, as absolute perfection, could not have created the world for an egotistic end (for then it would have been simpler not to create it at all), if on the other hand we cannot suppose that He created it only by accident or as a plaything, it therefore follows that He created the world only in the interest of the created beings—that is to say, out of goodness. Such is at least the only way in which the human mind can conceive the reason of creation; such is, translated into human language, the only hypothesis which permits us to conceive of the relation between the infinite and the finite, between the imperfect and the perfect, between the Creator and the creature.”

According to Paul Janet, therefore: if the first absolute cause is goodness, the absolute end must also be goodness. God, the absolute cause, by creating the world, had goodness in view as His end. Inasmuch as man is derived from God, man's end must be identical with God's, goodness. By achieving this end, since there are no two absolutes, man *ipso facto* becomes an absolute cause, and therefore at one with God, sharing His power, partaking of His wisdom, and striving for that “divine event toward which the whole creation moves”—that is, the setting up of the kingdom of God on this earth.

Not wanting in analogy to this view is the reasoning by which Henri Bergson seeks to guide us, though along a slightly devious path. His primal cause is the vital urge, the *élan vital*, and he regards it as a sort of divine message which is given out to and expressed in all created things. But it gets garbled in transmission. It is only dimly pre-

sented in the unconscious world of inorganic matter; it comes out more clearly in the realm of plants and animals; its highest expression is in man. Suppose we accept this vital thrust, this *élan vital*, as a symbol of creative power, through which God acts in and upon all things. It is evident that when transferred, its efficiency must depend on the nature of the instrument through which it is transmitted, and must flow out in all the greater potency according to the degree in which that instrument approaches perfection. Man as he is now is handicapped by the imperfections of his organism, yet even in his present state the divine message is able to manifest itself through him in flashes of intuition. That is why Bergson lays such stress on intuition and extols it above all knowledge acquired under the merely material limitations of man's intellect. It follows from this that the more perfect and good man becomes, the more harmony he brings into his life and thought, the more completely will he be capable of receiving the full effatus of the vital urge, the *élan vital*, and of applying its creative power to the human environment and to human conditions. Bergson's intuition, separated from knowledge in his system, will then become one with knowledge. In man will be combined the creature and the Creator, the doer and the deed; through him the divine message will pass out to matter as well as to life, and in creative activities will refashion as well as illuminate the world.

The analogy between creative activity in the universe and the creative activity of man finds its full exemplification in the domain of art. Says Janet:

"Nature is no more artist by chance than she is geometer by chance; her esthetics are no more fortuitous than her industry. It is because there is an industry of nature, a geometry and esthetics of nature, that man is capable of industry, of geometry, of esthetics. Nature is all that we are and all that we are is derived from nature. The crea-

tive genius the artist feels in himself is the revelation and the symbol of the creative genius of nature."

And Janet further writes:

"What we call in God the ideal creation (the difference of infinite from finite being understood) is an act analogous to that which we call the creative act of human genius."

According to Goethe's conception, life reaches its highest form in artistic creation because in art nature comes to self-consciousness and shows its inmost essence in visible shape. Schiller assigns to art the same place. His reason is that man, who in the rest of life is divided and shattered, wins his unity through art, so that he may act as one power.

Partaking of the divine creative power, all art is religion. Schopenhauer saw in art the embodiment of the universal will manifested in types that are eternal, time-transcending, immortal. Schopenhauer's theory of art has thus been summarized:

"The idea obtains a relatively complete realization in art (and philosophy) in the creations of genius. While ordinary cognition is merely subservient to the ends of mere living, or is purely relative, esthetic and philosophic cognition are ends in themselves, and reveal the pure idea, since they show the immediate essence or nature,—the "what,"—and not merely the mediate nature,—the "why," or relative causes of things. . . . In the series of arts constituting a series of objectifications of the idea, architecture contains the idea of mere blind force; sculpture and painting, respectively, of organic (human) form and action; poetry, of historical development; music,—the highest of the arts,—of the inner essence of things."

The secret of the powerful sway of music over the human soul lies in the fact that by its very nature of harmony and rhythm, it is the most immediate in its effects, attuning man to the universal soul. For this reason it has from time immemorial accompanied divine worship, to which all

the other arts—architecture, sculpture, painting, the inspired word of man—are ancillary.

Finally: how far are the ideas here expressed capable of practical application to every-day life? Will they stand the test of pragmatism? Will they work? Thus far in human history the incentive to moral perfection in man has been a system of rewards and punishments in the hereafter. Be good, says religion, in order that you may enter the kingdom of heaven after death. This system on the whole worked, and the proof is that the world goes on. But it does so laboriously, painfully, haltingly; social readjustments are slow because of imperfect social unification, because of the fact that humanity fails to grasp the fundamental principle, underlying all creation, that goodness is power, that each individual is simply a unit, that his strength comes from the unity and harmony of all. In a word, the system of rewards and punishments as practised to-day, is too remote, too detached from man's life and experience, and for that reason is inefficient and wasteful; it follows, so to speak, a circuitous route, meeting science half way and winking at it from behind hedges. It is out of date, because while in education and even in the treatment of criminals we are gradually seeing light and abolishing the rod, we still lay emphasis on hell in our religion. This antiquated system is bound to be superseded in the course of time by a system of rewards in this present world as offering the highest possible incentive to moral perfection and goodness, with religion and science as a single cult leading humanity harmoniously along a straight path toward the common goal. A constructive view of this sort would naturally leave punishments out of account, except merely as dissuasives.

It may be pertinent here to remark that the great American pragmatist philosopher, Prof. William James, already referred to in this article, saw the need, toward the end

of his life, of a new constructive metaphysics which, by fusing science and religion into one cult, would work for the greatest good of mankind.

To set aright a world manifestly out of joint, we must start at the beginning, with the bringing up of the new generation. What makes a man a Mohammedan, a Buddhist, a Hebrew, a Christian? Clearly, it is the way in which he has been brought up from childhood. It is perfectly practicable to educate children in the idea of attaining goodness in their lives and souls as a means of attaining to God and to all power. The possession of the earth and the fulness thereof is a powerful incentive, and there can be no greater than the cry of the Scriptures, "Oh grave, where is thy victory? Oh death, where is thy sting?"

Far more potent than the lure of immortality beyond the grave is the incentive of immortality in man's actual life, for it is easier for the mind to grasp the idea of uninterrupted bodily existence with all it implies than that of one resumed after the dissolution of the material body with only belief to substantiate the beyond. If, as the scientific argument demonstrates, it is possible to synthesize matter from ether, then it is also possible to achieve immortality. The potentialities of ether being infinite, immortality for human beings may thus mean aspects and modes of existence of which in our present state of knowledge we can form no adequate conception. Nor is the practicability of the incentive invalidated by the consideration that life is too short for any one individual to realize perfection and to achieve divinity in his personal existence. For man does not live for himself alone—more fully and more intensely he lives for his children and for generations yet unborn. But the greatest assurance that this system would work lies in the fact that it would be able to perpetuate itself by the very good it would achieve in uniting mankind as one power.

There is still one more aspect to be considered: that of the methods by which man may be able to create matter and refashion not merely social conditions, but the very physical environment itself, in the midst of which his lot is cast. How, then, shall he, ceasing to adapt himself to his inanimate surroundings as something which he cannot change, but must take for granted, begin to adapt them to his needs and plans? This can be accomplished only by intense concentration, involving not merely individual, but also social unification. We get the model and forecast of these in the organism itself, where concentration is essential to all activities and to every putting forth of will. The human individual is able not only to work out plans, but to hold his mind definitely on particular ends which he wishes to see realized. How, then, are the numerous individuals who make up society, with different interests and ideals and with conflicting aims, to unite their multifarious will powers with a view to a common result? It must be noted in the first place that a social community is not a mere multiplicity of individual units, but has its members linked together in a thousand ways. To a large extent, and for things common to it, the community thinks in common. It is now recognized that there is a social as well as an individual consciousness, a social will as well as an individual will, and that these collective powers of society are coming to be exerted in a more intense way and over a much wider field than was formerly the case. Communities are more unified than before; they think more and will more in common than at any previous period of social history. If individual telepathy is possible, due to individual consciousness and will, what is to exclude the possibility of a telepathy, of a thought transference which is social in character, which proceeds from the community thinking and willing as a whole?

If, however, the prospect of concentration on so vast

a scale may seem far too remote from the present, history on the other hand furnishes us with ample illustrations of intense individual concentration associated with transcendental powers. Such, for instance, were the mystics of old who, by abstracting themselves from the interests and impressions that constantly bombard our conscious existence, were enabled to unite with the soul of the universe, with God, and thus gain wondrous wisdom and power. The adepts of Yogi in India, the followers of Zen in Japan, all belong in the same class. But perhaps the most shining individual example we see in Buddha who, forsaking the life of pomp and pleasure, retired into himself and meditated upon the miseries of humankind until he became aware of the essence of things and of his own mission. Even so the Son of Man went into the desert and fasted, and prayed, and wrestled with his soul ere he gave himself to the salvation of the world.

Over the bridge that the Past ever throws to the Future we may tentatively trace the route which humanity in ages to come is to travel. With moral perfection as the cornerstone of all individual and universal existence, life must needs become one common prayer, in which human souls, following the path of unity and harmony, as with one accord will become one force, one power. Acting as an impetus in the world of ether, this force will be potent to transform by means of brain waves the pure idea into creative idea, thus completing the cycle as it is now exemplified in the order of creation. Says Janet:

“The principle of good which is in the universe, must be not only conservator, but organizer, creator, promoter.”

But after all, the methods and ways and means of concentration are only a matter of detail which we may safely intrust to the future, once the fundamental truth is grasped that by achieving moral perfection man will achieve his unity with God and partake of the divine power of creation.

By inference this power is at present denied to man because of his imperfect morality, his self-seeking, his lack of harmony and unity within himself and with the rest of mankind. Nor can there be human freedom—all the legislation in the world notwithstanding—until humanity grasps the inner meaning of the fundamental laws of man's spiritual development.

To sum up. The pre-condition of the mastery of mind over matter is harmony and unity in the thoughts of men, and by implication in their lives and actions. Thus harmonized and unified, mind action, giving rise to rhythmic ether waves, would liberate and direct the intra-atomic energies, and open up to humanity the new unknown source of power to which Professor Ramsey alludes. The closing words of Bergson's address before the English Society for Psychic Research seem to point in the same direction, for he predicts that "the science of mind will attain results surpassing all our hopes." The new source of power will enable man to reshape or even create his environment at will. As soon as this truth is realized a new era will dawn upon the world. Blending science and religion into one cult, mankind will devote itself to the task of harmonizing and unifying human thought. The history of civilization is the history of great religious movements. Christianity, Buddhism, Mohammedanism, shaped the destiny of the world by inspiring its people with great ethical principles. The goal of man is to become divine, and the way to attain it is the way indicated by every religion—the *via beatifica*. When every one awakens to the idea that he can help or hinder the bringing of heaven on earth, there will be no need of jails or standing armies. Humanity will then have set out on its quest of the Holy Grail. Thus the greatest power in the world is the power of thought, since behind it is that something—the "substance" of Spinoza, the ether of modern science—in a word, the spirit out of which all

things arise. Ultimately, the forces at work in the world will not be measured in terms of horse-power, of foot-pounds, of calories, but in terms of mind—unified, harmonious, creative. There is awe-inspiring grandeur in the conception of the potential worlds embodied in ether which, at the call of man, the creator, may arise and be.

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